TEJUS
CONSULTANTS

TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Location/Source	At Site/Plant	Date of Sampling	10.09.2019
Period of Soaking	24 hours	Date of Testing	10.09.2019

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.	650	652	665	
B	Weight of oven - dry sample gm.	641	640	652	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1685	1688	1690	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.671	2.678	2.608	2.652
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.404	1.875	1.994	1.758

Note:

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, G.B.M.P.,
Bangalore.

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Consultants	Tejus Consultants, Bangalore
Contractor	Sri. N Lokanath Reddy

TEJUS CONSULTANTS

SIEVE ANALYSIS

Total Weight:	3000 gms		
Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Sample Location	At Site/Plant	Date of Sampling	10.09.2019
		Date of Testing	10.09.2019

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	245	245	8.17	91.83	90 - 100
2.36 mm	326	571	19.03	80.97	75 - 100
1.18 mm	441	1012	33.73	66.27	55 - 90
0.600 mm	480	1492	49.73	50.27	35 -59
0.300 mm	715	2207	73.57	26.43	8-30
0.150 mm	625	2832	94.40	5.60	0 - 10
Pan	168	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	**Proposed Use**	Concrete	
Sample Location	Plant/At site	**Date of Sampling**	10.09.2019	
		Date of Testing	10.09.2019	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	282	282	2.82	97.18	95 - 100
10.00 mm	4850	5132	51.32	48.68	25 - 55
4.75 mm	4236	9368	93.68	6.32	0 - 10
Pan	632	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .	
Consultants	TEJUS CONSULTANTS	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size		Proposed Use	Concrete	
Sample Location	At Site/Plant		Date of Sampling	10.09.2019	
			Date of Testing	10.09.2019	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	552	552	5.52	94.48	90-100
10.0	4634	5186	51.86	48.14	40-85
4.75	4532	9718	97.18	2.82	0-10
Pan	282	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Grade of concrete:	M30
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	10.09.2019	17.09.2019	7 days	8.300	22500	448	19.91	20.04
2	10.09.2019	17.09.2019	7 days	8.320	22500	453	20.13	
3	10.09.2019	17.09.2019	7 days	8.325	22500	452	20.09	

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Grade of concrete:	M30
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	10.09.2019	08.10.2019	28 days	8.132	22500	680	30.22	30.25
2	10.09.2019	08.10.2019	28 days	8.140	22500	684	30.40	
3	10.09.2019	08.10.2019	28 days	8.142	22500	678	30.13	

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
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Bangalore.

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CONSULTANTS & TESTING CENTER

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Soil Stabilization and Shoring Services | Non - Destructive Testing

NABL ACCREDITED AS PER ISO/IEC 17025:2017

Job No.: CECTC/LNR/QC/ 2019-20

Date: 11.09.2019

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Bruhath Bangalore Mahanagara Palike**
Agency : **Sri. N Lokanath Reddy,** Contractor, Bangalore.
Name of Work : Construction of RCC Retaining Wall near Water Tank (Behind Govt.School) in Sanjeevinninagara in Ward No.07.Byatarayanapura.
Location : For Wall
Sample Identification : 10mm, 12mm, 20mm & 25mm Fe 500 TMT Bars
Technical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)
Date of test: : 11.09.2019

Sl.No	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
			0.20 % proof stress/ yield stress ($N/mm^{2)}$	Tensile strength ($N/mm^{2)}$	Elongation, percent on gauge length
1	10	0.617	531	574	16
2	12	0.889	547	582	17
3	20	2.465	552	596	18
4	25	3.858	561	611	19

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For Civil Experts

Authorised Signature

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

174, Sri Ranga Complex, Amrutha Nagar Main Road, New Bank Colony, Konanakunte, Bangalore - 560 062.

Test Report on Cement

TEJUS CONSULTANTS

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Sample ID	Cement
Date of Sample Tested	13.09.2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	35	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	268	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	4.00	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	29.00%	25 % to 35

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	**Proposed Use**	concrete
Location/Source	At Site/Plant	**Date of Sampling**	13.09.2019
Period of Soaking	24 hours	**Date of Testing**	13.09.2019

Sl. No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.		656	672	678	
B	Weight of oven - dry sample gm.		649	662	670	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1685	1698	1702	
E	Bulk specific gravity	$\frac{B}{(C+A-D)}$	2.638	2.659	2.669	2.655
G	Absorption (%)	$\frac{(A-B)*100}{B}$	1.079	1.511	1.194	1.261

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Detailed Estimate for Construction of RCC retaining Wall, head Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .				
Consultants	Tejus Consultants, Bangalore				
Contractor	Sri. N Lokanath Reddy				
SIEVE ANALYSIS					
Total Weight:	3000 gms				
Type of Material	Fine aggregate (River Sand/ M sand)		Proposed Use	concrete	
Sample Location	At Site/Plant		Date of Sampling	13.09.2019	
			Date of Testing	13.09.2019	
IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	242	242	8.07	91.93	90 - 100
2.36 mm	326	568	18.93	81.07	75 - 100
1.18 mm	417	985	32.83	67.17	55 - 90
0.600 mm	486	1471	49.03	50.97	35 -59
0.300 mm	716	2187	72.90	27.10	8-30
0.150 mm	623	2810	93.67	6.33	0 - 10
Pan	190	3000			-
Remarks :		✓ Satisfactory / Not Satisfactory			

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Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Authorised Signatory

TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	Proposed Use	Concrete
Sample Location	Plant/At site	Date of Sampling	13.09.2019
		Date of Testing	13.09.2019

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	278	278	2.78	97.22	95 - 100
10.00 mm	4846	5124	51.24	48.76	25 - 55
4.75 mm	4230	9354	93.54	6.46	0 - 10
Pan	646	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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Authorised Signatory

Assistant Executive Engineer.
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P..
Bangalore.

TEST REPORT					
Clients	Bruhat Bangalore Mahanagara Palike				
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .				
Consultants	TEJUS CONSULTANTS				
Contractor	Sri. N Lokanath Reddy				
Total Weight:	10000	gms			
SIEVE ANALYSIS					
Type of Material	12.5 mm down size		Proposed Use	Concrete	
Sample Location	At Site/Plant		Date of Sampling	13.09.2019	
			Date of Testing	13.09.2019	
IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	546	546	5.46	94.54	90-100
10.0	4518	5064	50.64	49.36	40-85
4.75	4542	9606	96.06	3.94	0-10
Pan	394	10000			
Remarks :			✓ Satisfactory / Not Satisfactory		

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Authorised Signatory

Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Grade of concrete:	M30
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	13.09.2019	20.09.2019	7 days	8.300	22500	446	19.82	20.04
2	13.09.2019	20.09.2019	7 days	8.320	22500	455	20.22	
3	13.09.2019	20.09.2019	7 days	8.325	22500	452	20.09	

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Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy .
Grade of concrete:	M30
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	13.09.2019	11.10.2019	28 days	8.132	22500	680	30.22	30.28
2	13.09.2019	11.10.2019	28 days	8.140	22500	680	30.22	
3	13.09.2019	11.10.2019	28 days	8.142	22500	684	30.40	

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TEJUS CONSULTANTS

Authorised Signatory

Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

Test Report on Cement

TEJUS CONSULTANTS

Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Sample ID	Cement
Date of Sample Tested	16.09.2019
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	38	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	282	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	6.00	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	32.00%	25 % to 35

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Assistant Executive Engineer
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

TEJUS
CONSULTANTS

TEST REPORT

Clients	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of RCC retaining Wall near Water tank (behind govt School) in Sanjeevininagara in Ward no.07 Byatarayanapura .
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Location/Source	At Site/Plant	Date of Sampling	16.09.2019
Period of Soaking	24 hours	Date of Testing	16.09.2019

Sl. No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.	650	680	665	
B	Weight of oven - dry sample gm.	641	670	652	
C	Weight of Pycnometer Filled with water gm	1275	1275	1275	
D	Weight of Pycnometer + sample + water gm	1686	1703	1694	
E	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.682	2.659	2.650	2.664
G	Absorption (%) $\frac{(A-B)*100}{B}$	1.404	1.493	1.994	1.630

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